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SEQUENCE LISTING

<110> Benjamin, Christopher W.
Roberts, Steven L.
Karnovsky, Alla M.
Ruble, Cara L.

<120> Human Ion Channels

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acagtatctg	taacctggac	atcttctact	tccccttcga	ccagcaaaac	tgcacactca	480
ccttcagctc	attcctctac	acaggtaat	tgcagtgagg	tctcaggat	gggggtgaatg	540
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<210> 24
<211> 243
<212> DNA
<213> Homo sapiens

<400> 24
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ttgacacaac tccttccca cacacaggag tggagcgact acaaactgcg ctggaacccc 180
actgattttg gcaacatcac atctctcaag gtcccttctg agatgatctg gatccccgac 240
att 243

<210> 25
<211> 246
<212> DNA
<213> Homo sapiens

<400> 25
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gtgccctgtg tgctcatctg gggcctggtg ctgcttgcct actttctgcc agcacagggt 180
aaggcagtggc ccctaaccta ccccaaacc cgggctcgct cccgggaggc ggggccccgt 240
ctcact 246

<210> 26
<211> 439
<212> DNA
<213> Homo sapiens

<400> 26
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gcagccgcgg ggacatggcg tgggtggtg gcgtccgctg ggacacgttg agcacatga 180
cgcaattcat gacaatgagc gtggcgacca ccatgacgaa aataaggaac ctgaggagcc 240
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cacaaacacg gtttcctctg gtacgggctg gttacgcct ccagctgcgc cccctacacg 360
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ggaccccccag ctccctgga 439

<210> 27
<211> 597
<212> DNA
<213> Homo sapiens

<400> 27
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aaacatgctt tgtgtgttt gctgtatgtat tgagtaatag aatgtcagat ggaagcaagt 120

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aaattatttt acaatgtatt ttaagcctta cttggaaaaag taacaccaac aaatactatt	180
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ggtgaaaagag tgaataaata agcaattaag caatatctat tcttcattt gggcttaata	300
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<210> 28	
<211> 263	
<212> DNA	
<213> Homo sapiens	
<400> 28	
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acgccc当地 cagg gaacacagcg cggcgttaa tgtcaatggt gtctgc当地 atggccctga	180
gccgggcacg gatgcccccc tggcctctg agcgggctgc cccctccctc tt当地 ctccc	240
ctgtctccac ccccacccgac ctg	263
<210> 29	
<211> 401	
<212> DNA	
<213> Homo sapiens	
<400> 29	
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cccactggtg ggtgagtaac tgc当地 tccac catgatctt ggc当地 ctgg ccatc当地 gggt	300
gactgtgttt gagttgaaca tacactaccg caccacaacc acgc当地 acaa tgccc当地 gggt	360
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<210> 30	
<211> 213	
<212> DNA	
<213> Homo sapiens	
<400> 30	
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catggccttc tctgtttca cccatcatctg cac

213

<210> 31
<211> 639
<212> DNA
<213> *Homo sapiens*

<400> 31
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actcacataa aacatgatct ggtcatatacg gttgttgc c atggacatct ttgggggtggc 180
cttggatg cccaagagct cccactcccc ctggggttgg atgactttgc gagacgtgtc 240
tgtgatctcc cacacccctt tgtccatgcc cagcagcatg ctgtccactg gaagggaggc 300
cggtcaggatc attgcagacg ttttcccaag cctccggccc acgaaattgg agtccctcccc 360
cactgagctt ctaaacccaaa ttttccctcta tccttttaaa gcagggtatc ctggtttct 420
cagaagtggg ttacccgact agcaattcat atgtgtgtgg gcagcggcat taatttcttt 480
tgttggatgaa aacaagagtg agtcaagttc gttatggaa tattggatat gactgaaacg 540
tgagtcaaga actttggag tcattccat tttcccttc agtcccccaag tcgtatggtg 600
gtgttttagt ggaatcaagc ttgaatagct caatattt 639

<210> 32
<211> 685
<212> DNA
<213> *Homo sapiens*

<400> 32 cttctgcatg actcagaata ttctccttgg catggatttc tgccacagat ttgtaaaaca
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cagtcttcaa ctacacaata gcaatgtgtg tctccatatac acttgtcttt tgatttgct
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gcacatagta ggcactataa ataaaatgtac aatcaatgaa gcaatgctgt gcattttaaa
ctaaagatag ctaactaaag tcaaagaacc caagtaattc atttgagtagc acactgttca
gctggAACCC aaacagaaaaat ccaagtcttt attcttcaaa taccaccagt gcttttagagt
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<210> 33
<211> 484
<212> DNA
<213> *Homo sapiens*

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<400>	33					
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catttgtgc	tccagaaggc	aaatcggtt	cttccctcct	gccctctgt	ttggattta	240
aaaacacacc	ctgagaggca	taaatgcaga	ttttttttt	cctccagtga	attttctgt	300
accatgggcc	tcgcttaag	aagactcaac	agataacaag	tgtaaatgcc	gaaaacatca	360
acgaaaggca	gaggccaaa	gggaagggtg	atggtttac	taaaaggct	ttttctta	420
tttttaaaaa	ttcaatgtgc	atttccttag	tggtggttat	cctttgtgc	tcataaaaatg	480
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<210> 34

<211> 449

<212> DNA

<213> Homo sapiens

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tatggagac	tgattgtcac	atcactataa	cctacttaca	ctgttgaaa	cagacattgt	240
caattcaaaa	caaacaatag	aaaaccaaac	aaaaaacaga	tcagggaaag	aataaacaac	300
aacaaagaga	agatgatttgc	ctggtaaaaa	cgggtggtga	atagagattt	tccactgaat	360
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gacagtccag	actgagggaaa	tagcctatg				449

<210> 35

<211> 579

<212> DNA

<213> Homo sapiens

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gcagggcagt	gactgaagca	caggaagcag	tgacactcat	cagccatcat	caaatggaat	180
aacataagcg	gctgatcgaa	actagctgga	aggaaattgc	agtctataata	tctgtaaagca	240
tgttgggttt	tttttttaat	gttctgcctt	ttacacctat	catttatga	acatttctct	300
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tgggctattt	ggtgtgtgc	ccgaatcctc	aatcccggca	ttgcaatgaa	aagcagccat	420
aaatgagtga	tcatggctgt	gttccaataa	aactttatct	aagaaacaag	tggcaggctg	480
aaagtgctga	cccctagttt	acatcattag	atcttctata	aaaatggcta	taagatattc	540

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caggctgtga atattttatg gtatatttca caaattctc 579

<210> 36
<211> 683
<212> DNA
<213> Homo sapiens

<400> 36
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gctctagaag cggtgccat aggcagtact tgtgtcaccc cactgccagc tccaggtggc 120
tcaaaacagt aaagtaaaga gagactgttt agaagaaaagt aagaagagaa aacaagtact 180
ctttgcctt taaatcagag aattcttcca gatcttgtgg aagaccatca aggcagtact 240
tccatgagtc tgcaagaaac cacagcatta gtgggcttag ggtgccccct aaagcagata 300
caacttagat cataacacccc aagtcccttt gaatatctga aaagccttcc caagaagaat 360
gggaacaaac aagccagacataaagact acaataaata cctaattatt caatgcctgg 420
gcacagacag acatttacaa gtatcaagat catccagaa aacatgaccc caccaaatga 480
actaaataag gcaacagaga tcaatcctgg agaaacagag atatgtggcc tttcagacag 540
agaattcaaa attcagacag agaatttcaa gagtattttt gccagatata ctactctagg 600
ataaaaggtt ttttttttt ttcttcttca gcatgttaaa tatatcatgc cattctcttc 660
tggcttataa ggtttccact aaa 683

<210> 37
<211> 643
<212> DNA
<213> Homo sapiens

<400> 37
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aaagccagac tgtgagaaac tacatgtcaa agggcctggg ttccctcaaca gataaattgt 120
cagaaaaaga aaggacaga gggaaatct gtggattatg agttaaaag aaataaactt 180
caaaaattag caagtctaag ttacagtagc tagggattct ggtatgtggg aagcaatata 240
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gaccaaaaacc aggtcacatg gccacatctg tccagctca gctgaggcct gtgaatgtct 360
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<210> 38
<211> 385
<212> DNA

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<213> Homo sapiens

<400>	38					
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tacatttata	tataaagtat	ttcaagatga	atttgagaca	aattgaagta	acaaagcttg	180
atttccattc	tgcataacaat	attctctata	attacaatgt	aggTTTggc	cacttggTTT	240
gactaacata	gctatgccat	cattaaata	tctgtatgcc	tttggTTTct	gtaaattaaa	300
attcagacat	acaaagaaat	ataaggagag	ttaggagaac	agtgataaaa	gataaaatgg	360
caccacagta	attcctaaat	aaggg				385

<210> 39

<211> 655

<212> DNA

<213> Homo sapiens

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ccatcataCC	atacctaacc	ccgctgtatC	tGATATTAGG	ttcctaaata	aataAAAATA	540
aaactttact	atttactcac	taactctaaa	aatGCCttct	cttctAGTTT	actataACCCa	600
cacagagaaa	aaccatagat	atTTTATAAT	atAGTTAGA	tgctaAGTGG	caata	655

<210> 40

<211> 663

<212> DNA

<213> Homo sapiens

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ctgaggTTAT	gtgcaattgt	gggctacAGC	tgtaagaACA	taagaAGCAC	tagccAGTCC	360
ccaaGAGATG	gagagaAGCC	cagtGAAGCT	gtttatgcgc	aaAGAGATG	atTTTgagtt	420

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tagttcagt tccttggta	cactgctct ctcaccaagg	cagactctt gggagtgata	600
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gtg			663

<210> 41
<211> 551
<212> DNA
<213> Homo sapiens

<400> 41	ccatctgcac aatttcagca gccaaggcaca	ctatgtcact ccccaagtct ccccagtct	60
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catttgggg	gtgctgacac accagccccc	tgccacctca gccctctctg	480
aacaacaagc	atgcgaggga ggccaggggg	ctgaggcagc ttggcacagg	540
ccccctcagca	t		551

<210> 42
<211> 625
<212> DNA
<213> Homo sapiens

<400> 42	cattgttcta atcccgctt ataaattatg	tcactcaatc ctcatacccc	60
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ggagaggact	cggaggcaga ggtcagggc	agaggcctgg gaacagacac	540
ccaccccccgc	gccccccct tgtaccccg	ccggcccaagc tccctgccc	600
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<210> 43
<211> 465
<212> DNA
<213> Homo sapiens

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tattgggaa gtgggattat catgagagta caatccgta taaaagcgag ctggccctt 360
tctggctctc ttatatgagg gctctttgc ttctgcct tccaccatgg gtagatgcag 420
caagaagacc ctcaccacat atggcccccact cactttatg cttcc 465

<210> 44
<211> 546
<212> DNA
<213> Homo sapiens

<400> 44
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ggtagggaa tgacaggagc aaagtcccttca caaggagatc ttgcctgaca tgcttgagaa 120
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atggta 546

<210> 45
<211> 688
<212> DNA
<213> Homo sapiens

<400> 45
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ctgtgccgcc aaactctccg tatcaatctg gcctggact caaccaagtg atctctgact 180
tttggaaaga gtctgttttc agagttcacc cagaagatgg cttaatttgcatctccctg 240
agctgttagg ctttagacgg gtgggagtc tgccctgccc aagctagctc aaggacgagg 300
cccgccctgga ctcagcttgg agccacgtga tggcggtgag tttgtgagct cctggtaagg 360

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cgcagaggc	agatggagac	cttgcaccc	gcccggaaag	tgtcccccc	cctccaaatat	420
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gctatggAAC	caaataaccc	agaaattaaa	agcttcactg	tagctgcct	tttccccatt	540
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gaagtctgta	gatataattga	gcaacagcca	ccctctctgg	gtccctgcaa	atggtaccca	660
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<210> 46
<211> 663
<212> DNA
<213> Homo sapiens

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cccaaatgg	tgaacacgt	ttgcagaaga	gacagtccgc	agctaagtgt	gacatcctta		180
gcctccaaat	ggacaaacaa	gtaaaaaaaaa	tgtttcttc	ctgccccaa	actctacaaa		240
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cagggtgatt	tattctatca	tctctccctg	gaataaatcc	tatgtggag	agggaaaact		360
gcctcacaaat	ggcttttaat	ttgggaacct	gataatagaa	aggatggac	ctctgtctat		420
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<210> 47
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<212> DNA
<213> Homo sapiens

<400> 47	gatatgtcac	atttctgac	ctaggtaactc	gcactttagc	aaaaacaaaa	acaaaaacaa	60
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gaggggagaa	ggaagtgtaa	aattatgaat	ttagtttct	atttgttgag	tgttaggtac		420
tcattgaaaa	tctaaaagat	gtgtagaaat	cctaatagtt	gatccagaga	gtccgcata		480

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<210> 49
<211> 633
<212> DNA
<213> Homo sapiens

<400> 49	
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<210> 50
<211> 446
<212> DNA
<213> Homo sapiens

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<210> 51
<211> 638
<212> DNA
<213> Homo sapiens

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<210> 52
<211> 707
<212> DNA
<213> Homo sapiens

<400> 52
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ggggcagagt attctccaaa tgccctatac acttaacttgc agcactaaat gtatttgtgc 180
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<210> 53
<211> 654
<212> DNA
<213> Homo sapiens

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<210> 54
<211> 775
<212> DNA
<213> Homo sapiens

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<211> 224
<212> DNA
<213> Homo sapiens

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	aaacatgccg	ggcatagggg	cttacacctg	taatcccagc	actt		224

<210> 56
<211> 465
<212> DNA
<213> Homo sapiens

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	aagccacagg	ggaggagcta	cccaaggcca	tggagccca	cctcttgcat	cagtgtgacc	180
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	ggaatggttg	tatttccca	atgcctgtac	tcccattgta	tcttaggaagt	ataataggtt	360
	cgtgcttttgc	attgtaaagg	cttataaggca	aaaggggactt	gccttgtctc	agatgagact	420
	ttgaactcag	actgttgagt	taatgctgga	atgagtttaag	atttt		465

<210> 57
<211> 621
<212> DNA
<213> Homo sapiens

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<210> 58
<211> 24
<212> PRT
<213> Homo sapiens

<400> 58

Trp Asn Leu Glu Asp Asn Gly Gly Ile Asn Ala Phe Lys Ile Pro Ser
1 5 10 15

Glu Asn Tyr Phe Gln Pro Arg Ile
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<210> 59
<211> 27
<212> PRT
<213> Homo sapiens

<400> 59

Pro Ala Thr Ser Ser Ser Gln Leu Ile Ser Ile Glu Thr Glu Leu Ser
1 5 10 15

Leu Ala Gln Cys Ile Ser Val Val Ser Ala Glu
20 25

<210> 60
<211> 63
<212> PRT
<213> Homo sapiens

<400> 60

Thr Cys Ile Phe Leu Pro Val Leu Lys Leu Asn His Leu Phe Val Leu
1 5 10 15

Ile Phe Val Ser Leu Ser Pro Cys Pro Gln Pro Val Ala Thr Thr Ile
20 25 30

Leu Leu Ser Val Ser Met Asn Leu Thr Thr Leu His Thr Ser Tyr Lys
35 40 45

Trp Arg His Thr Val Phe Tyr Gly Phe Leu Glu Ala Gly Ile Phe
50 55 60

<210> 61
<211> 64
<212> PRT
<213> Homo sapiens

<400> 61

Thr Ile Gly Gly Thr Leu Leu Gly Leu Ser Phe Leu Ile Cys Lys Ala
1 5 10 15

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Leu Val Ile Leu Glu Ser Ser Ser His Phe Phe Val Asp Arg Arg Arg
20 25 30

Gly Ser Gly Lys Lys Ala Tyr Ala Asn Lys Gln Pro Gln Gly Lys Pro
35 40 45

Ala Ala Gly Ala Leu Pro Ser Trp Leu Arg Lys Leu Pro Leu Gly Arg
50 55 60

<210> 62

<211> 50

<212> PRT

<213> Homo sapiens

<400> 62

Trp Lys Asn Trp Leu Phe Phe Thr Cys Leu His Cys Thr Thr Pro His
1 5 10 15

Asp Val Met Phe His Ile Leu Leu Lys Ile Pro Glu Phe His Glu Val
20 25 30

Leu Gly Thr Cys His Ile Leu Gln Gly Leu Asn Lys Ile Val Phe Thr
35 40 45

Leu Pro
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<210> 63

<211> 36

<212> PRT

<213> Homo sapiens

<400> 63

Thr Trp Thr Pro Asp Gly Glu Ser Val Leu Arg Asp Pro Glu Gly Trp
1 5 10 15

Glu His Trp Thr Pro Asp Gly Glu Ser Val Leu Arg Asp Pro Glu Gly
20 25 30

Trp Glu His Trp
35

<210> 64

<211> 45

<212> PRT

<213> Homo sapiens

<400> 64

Arg Gln Glu Ala Leu Leu His His Val Ala Thr Ile Ala Asn Thr Phe
1 5 10 15

Arg Ser His Arg Ala Ala Gln Arg Cys His Glu Asp Trp Lys Arg Leu
20 25 30

Ala Arg Val Met Asp Arg Phe Phe Leu Ala Ile Phe Phe
35 40 45

<210> 65

<211> 24

<212> PRT

<213> Homo sapiens

<400> 65

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His Cys Gln Leu Ser Pro Leu Pro Pro Gly Ile Phe Ser Ile Ser Cys
1 5 10 15

Trp Leu Ser Lys Arg Trp Arg Pro
20

<210> 66
<211> 36
<212> PRT
<213> Homo sapiens

<400> 66

Gln Ser Trp Leu Asp Thr Arg Leu Ala Trp Asn Thr Ser Ala His Pro
1 5 10 15

Arg His Ala Ile Thr Leu Pro Trp Glu Ser Leu Trp Thr Pro Arg Leu
20 25 30

Thr Ile Leu Glu
35

<210> 67
<211> 24
<212> PRT
<213> Homo sapiens

<400> 67

Trp Asn Leu Glu Asp Asn Gly Gly Ile Asn Ala Phe Lys Ile Pro Ser
1 5 10 15

Glu Asn Tyr Phe Gln Pro Arg Ile
20

<210> 68
<211> 38
<212> PRT
<213> Homo sapiens

<400> 68

Cys Leu Ser Leu Met Val Gly Ser Leu Leu Glu Thr Ile Phe Ile Thr
1 5 10 15

His Leu Leu His Val Ala Thr Thr Gln Pro Pro Pro Leu Pro Arg Trp
20 25 30

Leu His Ser Leu Leu Leu
35

<210> 69
<211> 89
<212> PRT
<213> Homo sapiens

<400> 69

Gly Glu Thr Asp Val Ile Tyr Leu Leu Ile Ile Cys Arg Lys Ile Thr
1 5 10 15

Asn Ile Met Val Pro Cys Val Leu Ile Ser Gly Leu Val Leu Leu Ala
20 25 30

Tyr Phe Leu Pro Ala Gln Ser Leu Gly Thr Ala Ala Pro Glu Ile Arg
35 40 45

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Cys Cys Gly Asp Ala Val Asn Phe Val Ala Lys Asn Met Arg Gly Gln
50 55 60

Asp Thr Arg Gly Gln Asp Asp Gly Ile Cys Phe Trp Val Ala Arg Val
65 70 75 80

Leu Phe Ser Leu Gly Ser Asn Leu Ile
85

<210> 70

<211> 29

<212> PRT

<213> Homo sapiens

<400> 70

Asp Ser Thr Lys Ala Arg Pro Gln Lys Tyr Glu Gln Leu Leu His Ile
1 5 10 15

Glu Asp Asn Asp Phe Ala Met Arg Pro Gly Phe Gly Gly
20 25

<210> 71

<211> 40

<212> PRT

<213> Homo sapiens

<400> 71

Pro Asp Phe Arg Thr Asp Ser Phe Ser Val Arg Pro Thr Gln Ile Pro
1 5 10 15

Val Gly Asn Leu Pro Phe Pro Cys Ala Thr Glu Cys Lys Glu Asn Ser
20 25 30

Pro Lys Thr Ser Leu Thr Thr Leu
35 40

<210> 72

<211> 50

<212> PRT

<213> Homo sapiens

<400> 72

Gly Asp Cys Arg Met Ala His Ala Glu Gln Lys Leu Met Asp Asp Leu
1 5 10 15

Leu Asn Lys Thr Cys Tyr Asn Asn Leu Ile Arg Pro Ala Thr Ser Ser
20 25 30

Ser Gln Leu Ile Ser Ile Gln Thr Ala Leu Ser Leu Ala Gln Cys Ile
35 40 45

Ser Val

50

<210> 73

<211> 43

<212> PRT

<213> Homo sapiens

<400> 73

Ala Glu Gln Lys Leu Met Asp Asp Leu Leu Asn Lys Thr Arg Tyr His
1 5 10 15

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Asn Leu Ile Arg Pro Ala Ala Ser Ser Gln Leu Ile Ser Ile Glu
20 25 30

Met Glu Leu Ser Leu Ala Gln Cys Ile Ser Val
35 40

<210> 74
<211> 51
<212> PRT
<213> Homo sapiens

<400> 74

Arg Gly Thr Ala Ala Trp Pro Met Pro Ser Arg Lys Leu Met Asp Asp
1 5 10 15

Leu Leu Asn Lys Thr Cys Tyr Asn Asn Leu Ile Arg Pro Ala Thr Ser
20 25 30

Ser Ser Gln Leu Ile Ser Ile Gln Thr Ala Leu Ser Leu Ala Gln Cys
35 40 45

Ile Ser Val
50

<210> 75
<211> 45
<212> PRT
<213> Homo sapiens

<400> 75

Gly Lys Phe Thr Cys Ile Glu Val Lys Phe His Leu Glu Arg Gln Met
1 5 10 15

Gly Tyr Tyr Leu Ile Gln Met Tyr Ile Pro Ser Leu Leu Ile Val Ile
20 25 30

Leu Ser Trp Val Ser Leu Trp Ile Asn Met Asp Ala Ala
35 40 45

<210> 76
<211> 50
<212> PRT
<213> Homo sapiens

<400> 76

Val Ser Tyr Val Lys Ala Ile Asp Ile Trp Met Ala Val Cys Leu Leu
1 5 10 15

Phe Val Phe Ala Ala Leu Leu Glu Tyr Ala Ala Ile Asn Phe Val Ser
20 25 30

Arg Gln His Lys Glu Phe Ile Arg Leu Arg Arg Arg Gln Arg Arg Gln
35 40 45

Arg Leu
50

<210> 77
<211> 28
<212> PRT
<213> Homo sapiens

<400> 77

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Arg Leu Thr Leu Ile Leu Ser Cys Leu Met Asp Leu Lys Asn Phe Pro
1 5 10 15

Met Asp Ile Gln Thr Cys Thr Met Gln Leu Glu Ser
20 25

<210> 78

<211> 72

<212> PRT

<213> Homo sapiens

<400> 78

Ile Ser Leu Ser Ala Val Phe Leu Arg Gly Ser Leu Leu Lys Leu Trp
1 5 10 15

Leu Phe Ser Thr Gly Trp Tyr Asn Arg Leu Phe Ile Asn Phe Val Leu
20 25 30

Arg Arg His Val Phe Phe Val Leu Gln Thr Tyr Phe Pro Ala Ile
35 40 45

Leu Met Val Met Leu Ser Trp Val Ser Phe Trp Ile Asp Arg Arg Ala
50 55 60

Val Pro Ala Arg Val Ser Leu Gly
65 70

<210> 79

<211> 159

<212> PRT

<213> Homo sapiens

<400> 79

Arg Cys Arg Pro Ser Pro Tyr Val Val Asn Phe Leu Val Pro Ser Gly
1 5 10 15

Ile Leu Ile Ala Ile Asp Ala Leu Ser Phe Tyr Leu Pro Leu Glu Ser
20 25 30

Gly Asn Cys Ala Pro Phe Lys Met Thr Val Leu Leu Gly Tyr Ser Val
35 40 45

Phe Leu Leu Met Met Asn Asp Leu Leu Pro Ala Thr Ser Thr Ser Ser
50 55 60

His Ala Ser Leu Val Arg Pro His Pro Ser Arg Asp Gln Lys Arg Gly
65 70 75 80

Val Cys Trp Met Gly Arg Gly Met Gly Arg Thr Arg Arg Ser Glu Lys
85 90 95

Gly Ser Trp Lys Lys Ile Leu Trp Glu Arg Asn Lys Lys Phe Val Ala
100 105 110

Pro Leu Ala Leu Met Gln Thr Pro Leu Pro Ala Gly Val Tyr Phe Ala
115 120 125

Leu Cys Leu Ser Leu Met Val Gly Ser Leu Leu Glu Thr Ile Phe Ile
130 135 140

Thr His Leu Leu Ala Arg Gly His His Pro Ala Pro Thr Ser Ala
145 150 155

<210> 80

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<211> 60
<212> PRT
<213> Homo sapiens

<400> 80

Leu Ser Ser Ser Met Asp Val Asp Lys Thr Pro Lys Gly Leu Thr Ala
1 5 10 15

Tyr Val Ser Asn Glu Gly Arg Ile Arg Tyr Lys Lys Pro Met Lys Gly
20 25 30

Asp Ser Ile Cys Asn Leu Asp Ile Phe Tyr Phe Pro Phe Asp Gln Gln
35 40 45

Asn Cys Thr Leu Thr Phe Ser Ser Phe Leu Tyr Thr
50 55 60

<210> 81

<211> 33

<212> PRT

<213> Homo sapiens

<400> 81

Gln Glu Trp Ser Asp Tyr Lys Leu Arg Trp Asn Pro Thr Asp Phe Gly
1 5 10 15

Asn Ile Thr Ser Leu Lys Val Pro Ser Glu Met Ile Trp Ile Pro Asp
20 25 30

Ile

<210> 82

<211> 58

<212> PRT

<213> Homo sapiens

<400> 82

Cys Pro Gly Val Ile Arg Arg His His Gly Gly Ala Thr Asp Gly Pro
1 5 10 15

Arg Glu Thr Asp Val Ile Tyr Ser Leu Ile Ile Leu Arg Lys Pro Leu
20 25 30

Phe Tyr Val Ile Asn Ile Ile Val Pro Cys Val Leu Ile Trp Gly Leu
35 40 45

Val Leu Leu Ala Tyr Phe Leu Pro Ala Gln
50 55

<210> 83

<211> 43

<212> PRT

<213> Homo sapiens

<400> 83

Arg Phe Leu Ile Phe Val Met Val Val Ala Thr Leu Ile Val Met Asn
1 5 10 15

Cys Val Ile Val Leu Asn Val Ser Gln Arg Thr Pro Thr Thr His Ala
20 25 30

Met Ser Pro Arg Leu Arg His Val Ser Ala Glu

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35

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<210> 84
<211> 92
<212> PRT
<213> Homo sapiens

<400> 84

His Pro Asp Ser Lys Tyr His Leu Lys Lys Arg Ile Thr Ser Leu Ser
1 5 10 15

Leu Pro Ile Val Ser Ser Ser Glu Ala Asn Lys Val Leu Thr Arg Ala
20 25 30

Pro Ile Leu Gln Ser Thr Pro Val Thr Pro Pro Pro Leu Ser Pro Ala
35 40 45

Phe Gly Gly Thr Ser Lys Ile Asp Gln Tyr Ser Arg Ile Leu Phe Pro
50 55 60

Val Ala Phe Ala Gly Phe Asn Leu Val Tyr Trp Gly Ser Phe Ile Phe
65 70 75 80

Pro Lys Ile Gln Trp Glu Val Ser Thr Ser Val Glu
85 90

<210> 85
<211> 61
<212> PRT
<213> Homo sapiens

<400> 85

Arg Ser Val Gly Val Glu Thr Gly Glu Thr Lys Lys Glu Gly Ala Ala
1 5 10 15

Arg Ser Gly Gly Gln Gly Gly Ile Arg Ala Arg Leu Arg Pro Met Asp
20 25 30

Ala Asp Thr Ile Asp Ile Asn Ala Arg Ala Val Phe Pro Ala Ala Phe
35 40 45

Ala Ala Val Asn Val Ile Tyr Trp Ala Ala Tyr Ala Met
50 55 60

<210> 86
<211> 132
<212> PRT
<213> Homo sapiens

<400> 86

Asn Cys Cys Glu Glu Ile Tyr Thr Asp Ile Thr Tyr Ser Phe Tyr Ile
1 5 10 15

Ile Arg Leu Pro Met Phe Tyr Thr Ile Asn Leu Ile Ile Pro Cys Leu
20 25 30

Phe Ile Ser Phe Leu Thr Val Leu Val Phe Tyr Leu Pro Ser Asp Cys
35 40 45

Gly Glu Lys Val Thr Leu Cys Ile Ser Val Leu Leu Ser Leu Thr Val
50 55 60

Phe Leu Leu Val Ile Thr Thr Ile Pro Ser Thr Ser Leu Val Gly Pro
65 70 75 80

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Leu Val Gly Glu Tyr Leu Leu Phe Thr Met Ile Phe Gly Thr Leu Ala
85 90 95

Ile Val Val Thr Val Phe Glu Leu Asn Ile His Tyr Arg Thr Pro Thr
100 105 110

Thr His Thr Met Pro Arg Trp Val Lys Thr Val Phe Leu Lys Leu Leu
115 120 125

Pro Gln Val Leu
130

<210> 87

<211> 70

<212> PRT

<213> Homo sapiens

<400> 87

Ser Pro Thr His Asp Glu His Leu Leu His Gly Gly Gln Pro Pro Glu
1 5 10 15

Gly Asp Pro Asp Leu Ala Lys Ile Leu Glu Glu Val Arg Tyr Ile Ala
20 25 30

Asn Arg Phe Arg Cys Gln Asp Glu Ser Glu Ala Val Cys Asn Glu Trp
35 40 45

Lys Phe Pro Ala Cys Val Val Asp Arg Leu Cys Leu Met Ala Phe Ser
50 55 60

Val Phe Thr Ile Ile Cys
65 70

<210> 88

<211> 42

<212> PRT

<213> Homo sapiens

<400> 88

Glu Ile Thr Asp Thr Ser Arg Lys Val Ile Gln Thr Gln Gly Glu Trp
1 5 10 15

Glu Leu Leu Gly Ile Asn Lys Ala Thr Pro Lys Met Ser Met Gly Asn
20 25 30

Asn Leu Tyr Asp Gln Ile Met Phe Tyr Val
35 40

<210> 89

<211> 38

<212> PRT

<213> Homo sapiens

<400> 89

Asp Leu Ser Cys Leu Leu Ile Cys Ser Ile Ile Ala Cys Leu Tyr Asn
1 5 10 15

Ile Asn Ile Ile Leu Pro Cys Leu Leu Arg Ser Leu Met Lys Val Ile
20 25 30

Leu Phe Ile Leu Ala Ser
35

00188US1.ST25.txt

<210> 90
<211> 60
<212> PRT
<213> Homo sapiens

<400> 90

Phe Phe Ile Leu Leu Glu Asp Phe Ser Val Ser Ser Glu His Gly Leu
1 5 10 15

Ile Leu Gly Lys His Ser Ser Arg Ser Phe Met Pro Arg Phe Cys Ser
20 25 30

Phe Ile Cys Arg Leu Leu Pro Pro Cys His Phe Leu Pro Pro Pro Asn
35 40 45

Cys Glu Thr Ala Phe Ser Phe Leu Lys His Leu Trp
50 55 60

<210> 91
<211> 37
<212> PRT
<213> Homo sapiens

<400> 91

Gly Tyr Phe Leu Ser Leu Asp Cys Leu Ser Pro Asn Ile Phe Ile Ala
1 5 10 15

Ile Ser Leu Thr Phe Ile Ser Tyr Ser Cys Val Ser Tyr Ser Val Glu
20 25 30

Asn Leu Tyr Ser Pro
35
<210> 92
<211> 30
<212> PRT
<213> Homo sapiens

<400> 92

Phe Leu Asp Lys Val Leu Leu Glu His Ser His Asp His Ser Phe Met
1 5 10 15

Ala Ala Phe His Cys Asn Gly Gly Ile Glu Asp Ser Gly His
20 25 30

<210> 93
<211> 29
<212> PRT
<213> Homo sapiens

<400> 93

Ser Pro Gly Leu Ile Ser Val Ala Leu Phe Ser Ser Phe Gly Glu Val
1 5 10 15

Met Phe Ser Trp Met Ile Leu Ile Leu Val Asn Val Cys
20 25

<210> 94
<211> 31
<212> PRT
<213> Homo sapiens

<400> 94

00188US1.ST25.txt

Leu Ser Lys Glu Glu Thr Val Asp Asn Gly Glu Tyr Leu Leu Val Ser
1 5 10 15

Ala Thr Pro Leu Lys Met Glu Tyr Thr Asn Ser His Cys Asp Phe
20 25 30

<210> 95
<211> 18
<212> PRT
<213> Homo sapiens

<400> 95

Trp Cys His Phe Ile Phe Tyr His Cys Ser Pro Asn Ser Pro Tyr Ile
1 5 10 15

Ser Leu

<210> 96
<211> 44
<212> PRT
<213> Homo sapiens

<400> 96

Ile Phe Asn Phe Lys Phe Pro Leu Gln Asn Gln Lys Ile Ser Glu
1 5 10 15

Thr Tyr Val Ala Ala Leu Tyr Asn Glu Val Glu His Ser Leu Glu Phe
20 25 30

Arg Gln Ile Glu Leu Glu Asp Lys Thr Glu Leu Ser
35 40

<210> 97
<211> 43
<212> PRT
<213> Homo sapiens

<400> 97

Phe Leu Cys Ser Tyr Ser Cys Ser Pro Gln Leu His Ile Thr Ser Gly
1 5 10 15

Asp Val Phe Trp Thr Ser Pro Gln Asp Gly Met Ile Gly Ser Gly Cys
20 25 30

Ser Tyr Ile Pro Phe Ser Trp Val Arg Cys Ser
35 40

<210> 98
<211> 93
<212> PRT
<213> Homo sapiens

<400> 98

Gly His Ser Cys Ser Cys Pro Thr Val Ala Pro Asp Leu Gly Ile Ser
1 5 10 15

Ala Leu Leu Gly Ala Gln Glu Val Pro Cys Pro His Trp Leu Arg Ile
20 25 30

Gly Cys Ser Cys Pro Trp Ala Val Pro Ala Pro Val Gln Ser Glu Val
35 40 45

00188US1.ST25.txt

Val Ala Lys Pro Arg Cys Tyr His Ser Leu Ala Arg Cys Ala Phe Ile
50 55 60

Trp Gly Val Leu Thr His Gln Pro Pro Ala Thr Ser Ala Leu Ser Gly
65 70 75 80

Leu Trp Ala Thr Thr Ser Met Arg Gly Arg Pro Gly Gly
85 90

<210> 99

<211> 67

<212> PRT

<213> Homo sapiens

<400> 99

Tyr Leu Arg Leu Ala Gln Ser Pro Arg Glu Ser Ser Glu Leu Glu Leu
1 5 10 15

Glu Gly Ser Thr Trp Glu Arg Thr Arg Arg Gln Arg Ser Gly Ala Glu
20 25 30

Ala Trp Glu Gln Thr His Gly Pro Arg His Pro Arg Ala Pro Pro Leu
35 40 45

Tyr Pro Ala Arg Pro Ser Ser Leu Ala Pro Gly Cys Thr Ala Pro Ala
50 55 60

Arg Ala Arg

65

<210> 100

<211> 32

<212> PRT

<213> Homo sapiens

<400> 100

Pro Ala Val Phe His Lys Tyr Tyr Ala Ser Phe Ile Val Val Tyr Phe
1 5 10 15

Pro Phe Glu Glu Asn Asn Met Ser Phe Ala Ser Pro Pro Lys Thr His
20 25 30

<210> 101

<211> 20

<212> PRT

<213> Homo sapiens

<400> 101

Cys Thr Trp Ile Glu Pro Ser Ser Asp Met Pro Gln Phe Thr Leu Leu
1 5 10 15

Asn Thr Ser Trp
20

<210> 102

<211> 43

<212> PRT

<213> Homo sapiens

<400> 102

Pro Gly Lys Ala Gln Arg Ser Asp Gly Asp Leu Ala Ser Cys Pro Arg
1 5 10 15

00188US1.ST25.txt

Ser Ala Pro Pro Pro Ile Ser Gly Phe Ser Leu His Thr Asn Gln
20 25 30

Ala Glu Asn Ser Pro Leu Pro Thr Thr Pro His
35 40

<210> 103
<211> 66
<212> PRT
<213> Homo sapiens

<400> 103

Pro Pro Tyr Gln Val Leu Tyr Pro Gly Leu Phe Arg Phe Phe Ser Pro
1 5 10 15

Ile Ser Val Leu Pro Gly Leu Ser Tyr Arg Val Asp Cys Cys Pro Ser
20 25 30

Ser Leu Gly Ala Pro Gln Glu Leu Gln Asn Tyr Ser Ser Leu Thr Pro
35 40 45

Tyr Ser Gln Leu Tyr Met Thr Thr Asn Asp His Ser Leu Lys Gln Asn
50 55 60

Arg Gln
65

<210> 104
<211> 28
<212> PRT
<213> Homo sapiens

<400> 104

Pro Glu Gln Glu Asn Phe Thr His Ser Gly Asp Trp Glu Arg Val Glu
1 5 10 15

Ala Arg Thr Trp Lys Glu Ala Thr Tyr Ser Arg Cys
20 25

<210> 105
<211> 90
<212> PRT
<213> Homo sapiens

<400> 105

Ser Ala Phe Pro Thr Glu Val Thr Ser Ser Ser His Trp Asp Trp Leu
1 5 10 15

Asp Thr Gly Cys Ser Pro Gln Arg Ala Ser Gly Ser Arg Val Glu Cys
20 25 30

His Val Pro Trp Glu Gly Gln Gly Val Arg Glu Leu Pro Pro Leu Ala
35 40 45

Lys Arg Ser Pro Glu Gly Leu Cys His Glu Glu Gln Cys Ile Pro Ala
50 55 60

Gln Ile Leu Pro Phe Ser His Gly Leu His Asn Pro Gln Thr Ser Arg
65 70 75 80

Phe Pro Gln Val Pro Thr Pro Pro Gly Thr
85 90

00188US1.ST25.txt

<210> 106
<211> 37
<212> PRT
<213> Homo sapiens

<400> 106

Trp His Leu Ile Asn Tyr Ser Val Cys Ile Tyr Leu Ile Phe Ser Lys
1 5 10 15

His Leu Lys Ile Leu Leu Phe Thr Leu Tyr Pro Ile Leu Asn Lys Val
20 25 30

Ile Gln Asn Pro Cys
35

<210> 107
<211> 34
<212> PRT
<213> Homo sapiens

<400> 107

Arg Lys Ala Pro Ala Arg Val Leu Val Pro Thr Thr Lys Pro Met Gln
1 5 10 15

Arg Ala Pro His Ala Arg Gly Trp Leu Thr Pro Leu Pro Ala Ala Ala
20 25 30

His Arg

<210> 108
<211> 68
<212> PRT
<213> Homo sapiens

<400> 108

Phe Val Ile Glu Leu Glu His Pro Glu Gly Arg Met Thr Pro Ile Trp
1 5 10 15

Ser Lys Gly Leu Gln His Asp His Pro Gln Trp Gln Met Cys Leu Pro
20 25 30

Gly Asn His Ala His Pro Thr Pro His Cys Phe Ser Ala His Thr Ala
35 40 45

Pro Ile Cys Ser Asp Ser Gln Trp Arg Asp His Leu Leu Pro Arg Gly
50 55 60

Met Asn His Cys
65

<210> 109
<211> 36
<212> PRT
<213> Homo sapiens

<400> 109

Leu Leu Phe Lys Glu Asn Asn Gly Trp Val Asp Glu Arg Glu Cys Gln
1 5 10 15

Leu Asp Gln Gln Thr Ala Val Pro Thr Glu Val Leu Leu Ser Tyr Thr
20 25 30

00188US1.ST25.txt

Ile Lys Gln Tyr
35

<210> 110
<211> 41
<212> PRT
<213> Homo sapiens

<400> 110

Trp Asn Trp Phe Pro Val Gln Gly Glu Phe Leu Pro Cys Ile Leu Ser
1 5 10 15

Cys Pro Asp Lys Leu Trp Leu Pro Ser Ile Leu Asn Trp Asn Asn Trp
20 25 30

Val Asn Asn Tyr Leu Thr Cys Phe Tyr
35 40

<210> 111
<211> 53
<212> PRT
<213> Homo sapiens

<400> 111

Ile Gln Arg Leu His Glu Val Asp Gln Val Asn Ile Pro Leu Trp Leu
1 5 10 15

Tyr Gln Asn Gly Gly Val Trp His Ile Arg His Leu Lys Ala Ala Gly
20 25 30

Pro Cys Val Asp Leu Gly Leu Tyr Ala Val Ser Asn Ala Val Cys Ile
35 40 45

Phe Glu Ser Phe Thr
50

<210> 112
<211> 35
<212> PRT
<213> Homo sapiens

<400> 112

Tyr Gln Phe Thr Leu Leu Ile Gly Leu Ser Val Phe Leu Ile Leu Tyr
1 5 10 15

Thr Leu Ser Tyr Arg Leu Thr Ala Thr Cys Leu Gly Ile Pro Leu Met
20 25 30

Ser Ile Tyr
35

<210> 113
<211> 69
<212> PRT
<213> Homo sapiens

<400> 113

Ile Trp Leu Leu His Trp Ile Ser Asp Leu His Gly Ala Cys Ser Leu
1 5 10 15

Phe Val Leu Ala Asn Phe Ser Tyr Leu Glu Trp Leu Tyr Phe Pro Asn
20 25 30

00188US1.ST25.txt

Ala Cys Thr Pro Ile Val Ser Arg Lys Tyr Asn Arg Tyr Val Leu Leu
 35 40 45

Ile Val Lys Ala Tyr Arg Gln Lys Gly Leu Ala Leu Ser Gln Met Arg
 50 55 60

Leu Thr Gln Thr Val
 65

<210> 114
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 114

Cys Lys Ser Met Asp Pro Leu Ser Leu Ser Ala Phe Pro Cys Leu Ile
 1 5 10 15

Thr Asp Gly Leu Pro Gln Asn Gly Ala Arg Ile Glu Lys Gln Ile Thr
 20 25 30

Gln Ile His Ser Val Leu Gly Trp Val Cys Ser Asp Thr Cys Thr Ser
 35 40 45

Thr Gly Ala Ser Ala Gly Arg Ser Gly Leu Thr Glu
 50 55 60

<210> 115
 <211> 2131
 <212> DNA
 <213> Homo sapiens

<400> 115

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tccctgggaa cgtatagcac agcagcagca gacaaacctg ggttcagaac aagtccggct 180

tctgcctttt attggctgtc tgactgttagg aagttacttc ctcttattgc accttagtta 240

gctcgtttat tacatgaggg taaagcagta tctacctgat aggggattgg gaggattaaa 300

tgaggttaatc cattttaaa gggcttagaa tatacctgac acacagccag tgctcaacaa 360

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aattcagtgt ttaatagaaa gcccttcgt ccggtcacca acatcagcgt ccccacccaa 600

gtcaacatct cttcgcat gtctgccatc ctagatgtga atgaacagct gcacctcttg 660

tcatcattcc tgtggctgga aatggtttg gataaccat ttatcagctg gaacccagag 720

aatgtgagg gcatcacgaa gatgagttatg gcagccaaga acctgtggct cccagacatt 780

ttcatcatgt aactcatgga tgtggataag accccaaaag gcctcacagc atatgttaagt 840

aatgaaggct gcatcaggta taagaaaccc atgaagggtgg acagtatctg taacctggac 900

atcttctact tccccttcga ccagcagaac tgcacactca cttcagctc attcctctac 960

acagtggaca gcatgttgct ggacatggag aaagaagtgt gggaaaataac agacgcattcc 1020

00188US1.ST25.txt

cggaacatcc	ttcagaccca	tggagaatgg	gagctcctgg	gcctcagcaa	ggccaccgca	1080
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aggcccagcc	tctatgtcat	aaaccttctc	gtgcccagtg	gctttctggt	tgccatcgat	1200
gccctcagct	tctacccgtcc	agtaaaaagt	gggaatcgtg	tcccattcaa	gataacgctc	1260
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gtctggagct	tctctgcct	ccagggactg	gccaggtctc	cccccttcc	ttagtaccaa	1860
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agtcctacca	tatggttcta	ggccctctt	acgtcatctg	catagcagac	tatacctctt	2040
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aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	a			2131

<210> 116
<211> 471
<212> PRT
<213> Homo sapiens
<400> 116

Met Leu Ala Phe Ile Leu Ser Arg Ala Thr Pro Arg Pro Ala Leu Gly
1 5 10 15

Pro Leu Ser Tyr Arg Glu His Arg Val Ala Leu Leu His Leu Thr His
20 25 30

Ser Met Ser Thr Thr Gly Arg Gly Val Thr Phe Thr Ile Asn Cys Ser
35 40 45

Gly Phe Gly Gln His Gly Ala Asp Pro Thr Ala Val Asn Ser Val Phe
50 55 60

Asn Arg Lys Pro Phe Arg Pro Val Thr Asn Ile Ser Val Pro Thr Gln
65 70 75 80

Val Asn Ile Ser Phe Ala Met Ser Ala Ile Leu Asp Val Asn Glu Gln
85 90 95

Leu His Leu Leu Ser Ser Phe Leu Trp Leu Glu Met Val Trp Asp Asn
100 105 110

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Pro Phe Ile Ser Trp Asn Pro Glu Glu Cys Glu Gly Ile Thr Lys Met
115 120 125

Ser Met Ala Ala Lys Asn Leu Trp Leu Pro Asp Ile Phe Ile Ile Glu
130 135 140

Leu Met Asp Val Asp Lys Thr Pro Lys Gly Leu Thr Ala Tyr Val Ser
145 150 155 160

Asn Glu Gly Arg Ile Arg Tyr Lys Lys Pro Met Lys Val Asp Ser Ile
165 170 175

Cys Asn Leu Asp Ile Phe Tyr Phe Pro Phe Asp Gln Gln Asn Cys Thr
180 185 190

Leu Thr Phe Ser Ser Phe Leu Tyr Thr Val Asp Ser Met Leu Leu Asp
195 200 205

Met Glu Lys Glu Val Trp Glu Ile Thr Asp Ala Ser Arg Asn Ile Leu
210 215 220

Gln Thr His Gly Glu Trp Glu Leu Leu Gly Leu Ser Lys Ala Thr Ala
225 230 235 240

Lys Leu Ser Arg Gly Gly Asn Leu Tyr Asp Gln Ile Val Phe Tyr Val
245 250 255

Ala Ile Arg Arg Arg Pro Ser Leu Tyr Val Ile Asn Leu Leu Val Pro
260 265 270

Ser Gly Phe Leu Val Ala Ile Asp Ala Leu Ser Phe Tyr Leu Pro Val
275 280 285

Lys Ser Gly Asn Arg Val Pro Phe Lys Ile Thr Leu Leu Leu Gly Tyr
290 295 300

Asn Val Phe Leu Leu Met Met Ser Asp Leu Leu Pro Thr Ser Gly Thr
305 310 315 320

Pro Leu Ile Gly Val Tyr Phe Ala Leu Cys Leu Ser Leu Met Val Gly
325 330 335

Ser Leu Leu Glu Thr Ile Phe Ile Thr His Leu Leu His Val Ala Thr
340 345 350

Thr Gln Pro Pro Leu Pro Arg Trp Leu His Ser Leu Leu Leu His
355 360 365

Cys Asn Ser Pro Gly Arg Cys Cys Pro Thr Ala Pro Gln Lys Glu Asn
370 375 380

Lys Gly Pro Gly Leu Thr Pro Thr His Leu Pro Gly Val Lys Glu Pro
385 390 395 400

Glu Val Ser Ala Gly Gln Met Pro Gly Pro Ala Glu Ala Glu Leu Thr
405 410 415

Gly Gly Ser Glu Trp Thr Arg Ala Gln Arg Glu His Glu Ala Gln Lys
420 425 430

Gln His Ser Val Glu Leu Trp Leu Gln Phe Ser His Ala Met Asp Ala
435 440 445

Met Leu Phe Arg Leu Tyr Leu Leu Phe Met Ala Ser Ser Ile Ile Thr
450 455 460

00188US1.ST25.txt

Val Ile Cys Leu Trp Asn Thr
465 470

<210> 117
<211> 1465
<212> DNA
<213> Homo sapiens

<400> 117	
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gttactttca ccatcaattt ctcagggttt ggccagcacg gggcgatcc cactgctctg	180
aattcagtgt ttaatagaaa gccctccgt ccggtcacca acatcagcgt ccccacccaa	240
gtcaacatct cttcgcat gtctgccatc ctatgtgtatgtaatgact gcacctcttg	300
tcatcattcc tggcttggaa aatggtttgg gataacccat ttatcagctg gaacccagat	360
aatgcggag gcatcaagaa gtccggcatg gcaactgaga acctatggct ttcagatgtc	420
ttcatcgagg agtctgttggaa tcagacacct gcaggtctca tggcttagtat gtcaatagt	480
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gtaaacccggg catggagaag gatgtccagg agctttcaaa tacatcacag aacccatcc	660
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gccactaacc agtatgaaca agccatcttccatgtggcca tcagggcag gtgcaggccc	780
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gagccagagg tatcagcagg gcagatgcca gggccgggg aggccagatc gacagggggc	1260
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<210> 118
<211> 357
<212> PRT
<213> Homo sapiens

<400> 118

00188US1.ST25.txt

Trp Asn Pro Asp Glu Cys Gly Gly Ile Lys Lys Ser Gly Met Ala Thr
 1 5 10 15

Glu Asn Leu Trp Leu Ser Asp Val Phe Ile Glu Glu Ser Val Asp Gln
 20 25 30

Thr Pro Ala Gly Leu Met Ala Ser Met Ser Ile Val Lys Ala Thr Ser
 35 40 45

Asn Thr Ile Ser Gln Cys Gly Trp Ser Ala Ser Ala Asn Trp Thr Pro
 50 55 60

Ser Ile Ser Pro Ser Met Asp Arg Gly Glu Arg Ser Pro Ser Ala Leu
 65 70 75 80

Ser Pro Thr Gln Val Thr Arg Ala Trp Arg Arg Met Ser Arg Ser Phe
 85 90 95

Gln Ile His His Arg Thr Ser Phe Arg Thr Arg Arg Glu Trp Val Leu
 100 105 110

Leu Gly Ile Gln Lys Arg Thr Ile Lys Val Thr Val Ala Thr Asn Gln
 115 120 125

Tyr Glu Gln Ala Ile Phe His Val Ala Ile Arg Arg Arg Cys Arg Pro
 130 135 140

Ser Pro Tyr Val Val Asn Phe Leu Val Pro Ser Gly Ile Leu Ile Ala
 145 150 155 160

Ile Asp Ala Leu Ser Phe Tyr Leu Pro Leu Glu Ser Gly Asn Cys Ala
 165 170 175

Pro Phe Lys Met Thr Val Leu Leu Gly Tyr Ser Val Phe Leu Leu Met
 180 185 190

Met Asn Asp Leu Leu Pro Ala Thr Ser Thr Ser Ser His Ala Ser Leu
 195 200 205

Val Arg Val Tyr Phe Ala Leu Cys Leu Ser Leu Met Val Gly Ser Leu
 210 215 220

Leu Glu Thr Ile Phe Ile Thr His Leu Leu His Val Ala Thr Thr Gln
 225 230 235 240

Pro Leu Pro Leu Pro Arg Trp Leu His Ser Leu Leu Leu His Cys Thr
 245 250 255

Gly Gln Gly Arg Cys Cys Pro Thr Ala Pro Gln Lys Gly Asn Lys Gly
 260 265 270

Pro Gly Leu Thr Pro Thr His Leu Pro Gly Val Lys Glu Pro Glu Val
 275 280 285

Ser Ala Gly Gln Met Pro Gly Pro Gly Glu Ala Glu Leu Thr Gly Gly
 290 295 300

Ser Glu Trp Thr Arg Ala Gln Arg Glu His Glu Ala Gln Lys Gln His
 305 310 315 320

Ser Val Glu Leu Trp Val Gln Phe Ser His Ala Met Asp Ala Leu Leu
 325 330 335

Phe Arg Leu Tyr Leu Leu Phe Met Ala Ser Ser Ile Ile Thr Val Ile
 340 345 350

Cys Leu Trp Asn Thr

<210> 119
 <211> 7736
 <212> DNA
 <213> Homo sapiens

<400>	119
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aggaaaactgt tgaagaacgg ctgctctcg a gagaataaac acgacagagt tgaaagacct	180
tgagcaagat cacggaattt ccgagctaga aggtttctt cacacctacg taaacagcat	240
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tcgggcgcgg tggctcacgc ctgtaatccc agcactttga gaggccgagg caggcagatc	360
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